

APPENDIX F—continued.

Table II of Weir Discharges for Artesian Bores.

CALCULATED from Francis' formula: $Q = \left\{ 3.332(l - 0.2H)H^{\frac{3}{2}} \right\} \times 6.2321 \times 60 \times 60 \times 24$.

Where Q = discharge in gallons per 24 hours.

H = depth of water on weir in feet.

l = width of weir.

Weir, 2' 0" wide.

Depth of water on weir.		Discharge.		Depth of water on weir.		Discharge.		Depth of water on weir.		Discharge.	
		Cusecs.	Gallons per 24 hours.			Cusecs.	Gallons per 24 hours.			Cusecs.	Gallons per 24 hours.
Inches.				Inches.				Inches.			
1	1.00	0.1589	85,548	3 $\frac{3}{8}$	3.37	0.9658	520,010	5 $\frac{3}{4}$	5.75	2.1048	1,133,300
1 $\frac{1}{16}$		.1736	93,506	3 $\frac{7}{16}$		.9925	534,406	5 $\frac{13}{16}$		2.1377	1,151,005
1 $\frac{3}{8}$	.12	.1884	101,465	3 $\frac{1}{2}$	.50	1.0193	548,803	5 $\frac{7}{8}$	.87	2.1707	1,168,710
1 $\frac{3}{8}$		.2051	110,452	3 $\frac{9}{16}$		1.0462	563,366	5 $\frac{1}{2}$		2.2039	1,186,950
1 $\frac{1}{4}$	.25	.2218	119,440	3 $\frac{5}{8}$	.62	1.0732	577,930	6	6.00	2.2382	1,205,190
1 $\frac{5}{16}$		.2387	128,522	3 $\frac{11}{16}$		1.1004	592,588	6 $\frac{1}{16}$		2.2719	1,223,400
1 $\frac{3}{8}$	.37	.2556	137,604	3 $\frac{3}{4}$	.75	1.1277	607,247	6 $\frac{3}{8}$	.12	2.3057	1,241,610
1 $\frac{7}{16}$		.2732	147,100	3 $\frac{13}{16}$		1.1555	622,185	6 $\frac{3}{16}$		2.3399	1,259,975
1 $\frac{1}{2}$	.50	.2908	156,596	3 $\frac{7}{8}$	.87	1.1834	637,124	6 $\frac{1}{4}$	.25	2.3741	1,278,340
1 $\frac{9}{16}$		.3092	166,480	3 $\frac{5}{8}$		1.2115	652,782	6 $\frac{1}{8}$		2.4085	1,296,865
1 $\frac{5}{8}$	.62	.3276	176,364	4	4.00	1.2397	667,440	6 $\frac{3}{8}$	.37	2.4429	1,315,390
1 $\frac{11}{16}$		.3466	186,607	4 $\frac{1}{16}$		1.2681	682,760	6 $\frac{1}{2}$		2.4779	1,334,270
1 $\frac{3}{4}$	.75	.3656	196,850	4 $\frac{1}{8}$	.12	1.2966	698,080	6 $\frac{1}{4}$	.50	2.5130	1,353,150
1 $\frac{13}{16}$		.3852	207,410	4 $\frac{3}{16}$		1.3259	713,872	6 $\frac{9}{16}$		2.5482	1,372,150
1 $\frac{7}{8}$	.87	.4048	217,971	4 $\frac{1}{4}$	.25	1.3552	729,665	6 $\frac{3}{8}$	.62	2.5835	1,391,150
1 $\frac{5}{8}$		.4252	229,060	4 $\frac{5}{16}$		1.3843	745,403	6 $\frac{1}{16}$		2.6184	1,409,895
2	2.00	.4460	240,150	4 $\frac{3}{8}$	.37	1.4135	761,141	6 $\frac{3}{4}$	.75	2.6534	1,428,640
2 $\frac{1}{16}$		.4725	254,442	4 $\frac{7}{16}$		1.4432	777,117	6 $\frac{1}{2}$		2.6887	1,447,730
2 $\frac{1}{8}$	.12	.4991	268,735	4 $\frac{1}{2}$	.50	1.4730	793,093	6 $\frac{7}{8}$	.87	2.7240	1,466,820
2 $\frac{3}{16}$		.5150	277,301	4 $\frac{9}{16}$		1.5029	809,251	6 $\frac{5}{8}$		2.7599	1,486,065
2 $\frac{1}{4}$	.25	.5309	285,867	4 $\frac{5}{8}$	.62	1.5329	825,410	7	7.00	2.7958	1,505,310
2 $\frac{5}{16}$		.5529	297,722	4 $\frac{11}{16}$		1.5633	841,772	7 $\frac{1}{16}$		2.8316	1,524,680
2 $\frac{3}{8}$	.37	.5749	309,577	4 $\frac{3}{4}$	.75	1.5937	858,134	7 $\frac{1}{8}$	.12	2.8675	1,544,050
2 $\frac{7}{16}$		.5976	321,794	4 $\frac{3}{8}$		1.6243	874,662	7 $\frac{3}{16}$		2.9039	1,563,735
2 $\frac{1}{2}$	.50	.6203	334,011	4 $\frac{7}{8}$	.87	1.6550	891,190	7 $\frac{1}{4}$	.25	2.9404	1,583,420
2 $\frac{9}{16}$		.6436	346,527	4 $\frac{15}{16}$		1.6865	908,090	7 $\frac{5}{16}$		2.9770	1,603,025
2 $\frac{5}{8}$	.62	.6669	359,044	5	5.00	1.7180	924,990	7 $\frac{3}{8}$	.37	3.0137	1,622,630
2 $\frac{11}{16}$		.6908	371,977	5 $\frac{1}{16}$		1.7493	941,887	7 $\frac{7}{16}$		3.0502	1,642,400
2 $\frac{3}{4}$	.75	.7148	384,910	5 $\frac{1}{8}$	.12	1.7807	958,784	7 $\frac{1}{2}$	.50	3.0867	1,662,170
2 $\frac{13}{16}$		.7389	397,881	5 $\frac{3}{16}$		1.8124	975,863	7 $\frac{9}{16}$		3.1237	1,682,045
2 $\frac{7}{8}$	.87	.7630	410,853	5 $\frac{1}{4}$	.25	1.8442	992,943	7 $\frac{5}{8}$	.62	3.1608	1,701,920
2 $\frac{15}{16}$		.7875	424,085	5 $\frac{5}{16}$		1.8761	1,010,154	7 $\frac{11}{16}$		3.1980	1,721,925
3	3.00	.8121	437,318	5 $\frac{3}{8}$	.37	1.9081	1,027,366	7 $\frac{1}{2}$	.75	3.2352	1,741,930
3 $\frac{1}{16}$		.8372	450,854	5 $\frac{7}{16}$		1.9402	1,044,749	7 $\frac{13}{16}$		3.2725	1,762,105
3 $\frac{1}{8}$	.12	.8624	464,390	5 $\frac{1}{2}$	.50	1.9724	1,062,133	7 $\frac{7}{8}$	.87	3.3098	1,782,280
3 $\frac{3}{16}$		.8880	478,170	5 $\frac{9}{16}$		2.0052	1,079,776	7 $\frac{15}{16}$		3.3481	1,802,705
3 $\frac{1}{4}$	.25	.9137	491,950	5 $\frac{5}{8}$	.62	2.0380	1,097,420	8	8.00	3.3861	1,823,130
3 $\frac{5}{16}$		.9397	505,980	5 $\frac{11}{16}$		2.0714	1,115,360				

APPENDIX F—continued.

Table III of Weir Discharges for Artesian Bores.

CALCULATED from Francis' formula: $Q = \left\{ 3.332 (l - 0.2H) H^{\frac{3}{2}} \right\} \times 6.2321 \times 60 \times 60 \times 24$.

Where Q = discharge in gallons per 24 hours.

H = depth of water on weir in feet.

l = width of weir.

Weir, 3' 0" wide.

Depth of water on weir.		Discharge.		Depth of water on weir.		Discharge.		Depth of water on weir.		Discharge.	
		Cusecs.	Gallons per 24 hours.			Cusecs.	Gallons per 24 hours.			Cusecs.	Gallons per 24 hours.
Inches.				Inches.				Inches.			
1	1.00	0.2390	128,678	$3\frac{3}{8}$	3.37	1.4626	787,550	$5\frac{3}{4}$	5.75	3.2027	1,724,490
$1\frac{1}{16}$		.2618	140,677	$3\frac{7}{16}$		1.5033	809,500	$5\frac{1}{2}$		3.2571	1,753,815
$1\frac{1}{8}$	.12	.2836	152,676	$3\frac{1}{2}$	.50	1.5441	831,450	$5\frac{1}{8}$	.87	3.3116	1,783,140
$1\frac{3}{16}$		.3087	166,230	$3\frac{9}{16}$		1.5853	853,645	$5\frac{1}{4}$		3.3639	1,811,320
$1\frac{1}{4}$	.25	.3339	179,785	$3\frac{5}{8}$	.62	1.6266	875,840	6	6.00	3.4163	1,839,500
$1\frac{3}{8}$		.3594	193,497	$3\frac{11}{16}$		1.6682	898,250	$6\frac{1}{8}$		3.4645	1,865,480
$1\frac{1}{2}$	.37	.3848	207,210	$3\frac{3}{4}$	.75	1.7098	920,660	$6\frac{1}{4}$	.12	3.5128	1,891,460
$1\frac{5}{8}$		.4114	221,547	$3\frac{7}{8}$		1.7522	943,490	$6\frac{3}{8}$		3.5696	1,922,045
$1\frac{3}{4}$	.50	.4381	235,885	$3\frac{1}{2}$	.87	1.7946	966,320	$6\frac{1}{2}$	.25	3.6264	1,952,630
$1\frac{7}{8}$		.4658	250,819	$3\frac{15}{16}$		1.8376	989,495	$6\frac{5}{8}$		3.6796	1,981,315
$1\frac{1}{2}$	.62	.4935	265,753	4	4.00	1.8807	1,012,670	$6\frac{3}{4}$	.37	3.7329	2,010,000
$1\frac{9}{16}$		.5223	281,243	$4\frac{1}{16}$		1.9242	1,036,135	$6\frac{7}{16}$		3.7872	2,039,230
$1\frac{3}{4}$	.75	.5511	296,733	$4\frac{1}{8}$	.12	1.9678	1,059,600	$6\frac{1}{2}$	.50	3.8415	2,068,460
$1\frac{11}{16}$		.5808	312,731	$4\frac{3}{16}$		2.0126	1,083,735	$6\frac{9}{16}$		3.8962	2,097,910
$1\frac{5}{8}$	.87	.6105	328,730	$4\frac{1}{4}$	.25	2.0575	1,107,870	$6\frac{5}{8}$	.62	3.9509	2,127,360
$1\frac{13}{16}$		.6416	345,495	$4\frac{5}{16}$		2.1023	1,132,000	$6\frac{11}{16}$		4.0048	2,156,440
2	2.00	.6728	362,260	$4\frac{3}{8}$	.37	2.1471	1,156,130	$6\frac{3}{4}$	.75	4.0588	2,185,520
$2\frac{1}{16}$		.7043	379,297	$4\frac{7}{16}$		2.1926	1,180,610	$6\frac{1}{2}$		4.1138	2,215,165
$2\frac{1}{8}$	.12	.7361	396,334	$4\frac{1}{2}$	.50	2.2381	1,205,090	$6\frac{7}{8}$	.87	4.1689	2,244,810
$2\frac{3}{16}$		.7687	413,932	$4\frac{9}{16}$		2.2842	1,229,915	$6\frac{1}{2}$		4.2244	2,274,685
$2\frac{1}{4}$	.25	.8014	431,530	$4\frac{5}{8}$	.62	2.3303	1,254,740	7	7.00	4.2799	2,304,560
$2\frac{3}{8}$		.8349	449,565	$4\frac{11}{16}$		2.3768	1,279,820	$7\frac{1}{16}$		4.3358	2,334,680
$2\frac{1}{2}$	.37	.8684	467,600	$4\frac{3}{4}$	.75	2.4234	1,304,900	$7\frac{1}{8}$	.12	4.3918	2,364,800
$2\frac{5}{8}$		.9027	486,085	$4\frac{7}{8}$		2.4707	1,330,285	$7\frac{3}{16}$		4.4486	2,395,415
$2\frac{3}{4}$	.50	.9371	504,570	$4\frac{1}{2}$	.87	2.5180	1,355,670	$7\frac{1}{4}$	.25	4.5055	2,426,030
$2\frac{7}{8}$		.9723	523,555	$4\frac{5}{8}$		2.5663	1,381,775	$7\frac{5}{16}$		4.5621	2,456,550
3	.62	1.0076	542,540	5	5.00	2.6146	1,407,880	$7\frac{3}{8}$	.37	4.6188	2,487,070
$3\frac{1}{16}$		1.0440	562,155	$5\frac{1}{16}$		2.6626	1,433,720	$7\frac{7}{16}$		4.6760	2,517,860
$3\frac{1}{8}$	.75	1.0805	581,770	$5\frac{1}{8}$	.12	2.7106	1,459,560	$7\frac{1}{2}$	.50	4.7333	2,548,650
$3\frac{3}{16}$		1.1176	601,515	$5\frac{3}{16}$		2.7594	1,485,845	$7\frac{9}{16}$		4.7908	2,579,640
$3\frac{1}{4}$	.87	1.1538	621,260	$5\frac{1}{4}$	.25	2.8083	1,512,130	$7\frac{5}{8}$	.62	4.8483	2,610,630
$3\frac{5}{16}$		1.1912	641,420	$5\frac{5}{16}$		2.8576	1,538,650	$7\frac{11}{16}$		4.9063	2,641,835
3	3.00	1.2287	661,580	$5\frac{3}{8}$	.37	2.9068	1,565,170	$7\frac{1}{2}$	.75	4.9643	2,673,040
$3\frac{7}{16}$		1.2670	682,185	$5\frac{7}{16}$		2.9566	1,591,970	$7\frac{3}{8}$		5.0226	2,704,520
$3\frac{1}{2}$	.12	1.3052	702,790	$5\frac{1}{2}$	.50	3.0063	1,618,770	$7\frac{7}{8}$	.87	5.0811	2,736,000
$3\frac{3}{8}$		1.3442	723,785	$5\frac{9}{16}$		3.0571	1,645,950	$7\frac{1}{2}$		5.1403	2,767,895
$3\frac{1}{4}$	.25	1.3832	744,780	$5\frac{5}{8}$	.62	3.1080	1,673,130	8	8.00	5.1996	2,799,790
$3\frac{5}{16}$		1.4229	766,165	$5\frac{11}{16}$		3.1554	1,698,810				

APPENDIX F—*continued.***Table IV of Weir Discharges for Artesian Bores.**CALCULATED from formula $Q = 2.54 H^{\frac{5}{2}} \times 6.2321 \times 60 \times 60 \times 24$.

Where Q = discharge in gallons per 24 hours.

H = depth of water at centre of notch, in feet.

Triangular Notch Weir, 90°.

Depth of Water at Centre.		H ^{$\frac{5}{2}$} .	Discharge.		Depth of Water at Centre.		H ^{$\frac{5}{2}$} .	Discharge.	
Inches.			Cusecs.	Gallons per 24 hours.	Inches.			Cusecs.	Gallons per 24 hours.
1	1.00	0.0020	0.00508	2,735	2 $\frac{3}{16}$			0.0360	19,420
1 $\frac{1}{16}$			0.00592	3,190	2 $\frac{1}{4}$	2.25	0.0152	0.03861	20,789
1 $\frac{1}{8}$	.12	.0027	.00686	3,692	2 $\frac{5}{16}$			.0414	22,307
1 $\frac{3}{16}$			.0078	4,239	2 $\frac{3}{8}$	.37	.0174	.04425	23,825
1 $\frac{1}{4}$	.25	.0035	.00889	4,787	2 $\frac{7}{16}$			.0472	25,452
1 $\frac{5}{16}$			.0100	5,402	2 $\frac{1}{2}$	.50	.0198	.05029	27,080
1 $\frac{3}{8}$	.37	.0044	.01118	6,018	2 $\frac{9}{16}$			.0535	28,837
1 $\frac{7}{16}$			.0125	6,770	2 $\frac{5}{8}$	.62	.0224	.05682	30,595
1 $\frac{1}{2}$	.50	.0055	.01397	7,522	2 $\frac{11}{16}$			.0604	32,530
1 $\frac{9}{16}$			.0155	8,342	2 $\frac{3}{4}$	.75	.0252	.06401	34,465
1 $\frac{5}{8}$	.62	.0067	.01701	9,163	2 $\frac{13}{16}$			.0676	36,448
1 $\frac{11}{16}$			.0187	10,120	2 $\frac{7}{8}$	.87	.0281	.07137	38,431
1 $\frac{3}{4}$	.75	.0081	.02057	11,078	2 $\frac{15}{16}$			.0753	40,551
1 $\frac{13}{16}$			.0224	12,104	3	3.00	.0312	.07925	42,672
1 $\frac{7}{8}$	.87	.0096	.02438	13,130	3 $\frac{1}{2}$	3.50	.0459	.11658	62,776
1 $\frac{15}{16}$			.0265	14,292	4	4.00	.0641	.16281	87,702
2	2.00	.0113	.02870	15,454					
2 $\frac{1}{16}$			.0311	16,753					
2 $\frac{1}{8}$	.12	.0132	.03353	18,052					

APPENDIX G.

Weir Discharges—Formulæ used in Queensland.

At the necessary distance, say 3 or 4 yards above the weir, drive firmly into the bottom of the drain a stout stake with sawn top, where it can be conveniently reached, taking particular pains to make the top of the stake quite level with the sill of the weir. To ascertain the volume of water flowing from the bore, measure the depth of water on this stake by means of a divided square or a common rule. Look into the table for the measured depth in parts of an inch, or inches and parts, as the case may be; and in the column headed "Gallons per 24 hours" there will be found the discharge for each foot in width of the weir.

TABLE.

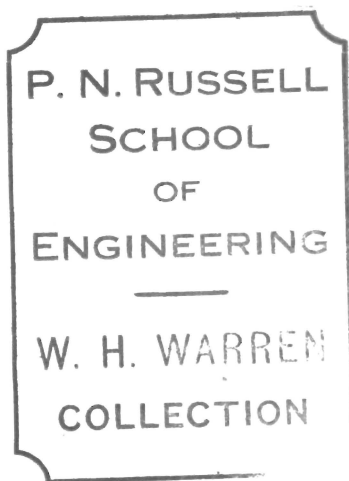
Coefficient 5.34. Rule†:— $\frac{2}{3} \sqrt{\text{Depth in Feet,}} \times 5.34 \times \text{Area in Feet} = \text{Discharge in Cubic Feet per Second.}$

Depth in inches.	Gallons per 24 hours.	Depth in inches.	Gallons per 24 hours.	Depth in inches.	Gallons per 24 hours.	Depth in inches.	Gallons per 24 hours.	Depth in inches.	Gallons per 24 hours.
$\frac{1}{16}$	721	2	130376	4	368774	6	677498	8	1043150
$\frac{1}{8}$	2038	$2\frac{1}{16}$	136536	$4\frac{1}{16}$	377457	$6\frac{1}{16}$	688116	$8\frac{1}{16}$	1055400
$\frac{3}{8}$	3744	$2\frac{2}{8}$	142791	$4\frac{2}{8}$	386258	$6\frac{2}{8}$	698791	$8\frac{2}{8}$	1067710
$\frac{1}{4}$	5760	$2\frac{3}{8}$	149140	$4\frac{3}{8}$	395013	$6\frac{3}{8}$	709511	$8\frac{3}{8}$	1080018
$\frac{5}{8}$	8056	$2\frac{4}{8}$	155566	$4\frac{4}{8}$	403894	$6\frac{4}{8}$	720288	$8\frac{4}{8}$	1092442
$\frac{3}{4}$	10590	$2\frac{5}{8}$	162108	$4\frac{5}{8}$	412841	$6\frac{5}{8}$	731122	$8\frac{5}{8}$	1104880
$\frac{7}{8}$	13345	$2\frac{6}{8}$	168726	$4\frac{6}{8}$	421856	$6\frac{6}{8}$	742012	$8\frac{6}{8}$	1117368
$1\frac{1}{16}$	16292	$2\frac{7}{8}$	175433	$4\frac{7}{8}$	430923	$6\frac{7}{8}$	752960	$8\frac{7}{8}$	1129907
$1\frac{1}{8}$	19449	$2\frac{8}{8}$	182199	$4\frac{8}{8}$	440077	$6\frac{8}{8}$	763946	$8\frac{8}{8}$	1142494
$1\frac{1}{4}$	22779	$2\frac{9}{8}$	189080	$4\frac{9}{8}$	449251	$6\frac{9}{8}$	774936	$8\frac{9}{8}$	1155122
$1\frac{3}{8}$	26274	$2\frac{10}{8}$	196039	$4\frac{10}{8}$	458519	$6\frac{10}{8}$	786100	$8\frac{10}{8}$	1167791
$1\frac{1}{2}$	29948	$2\frac{11}{8}$	203086	$4\frac{11}{8}$	467851	$6\frac{11}{8}$	797251	$8\frac{11}{8}$	1180501
$1\frac{5}{8}$	33768	$2\frac{12}{8}$	210212	$4\frac{12}{8}$	477231	$6\frac{12}{8}$	808456	$8\frac{12}{8}$	1193273
$1\frac{7}{8}$	37732	$2\frac{13}{8}$	217423	$4\frac{13}{8}$	486694	$6\frac{13}{8}$	819674	$8\frac{13}{8}$	1206086
$1\frac{15}{16}$	41848	$2\frac{14}{8}$	224715	$4\frac{14}{8}$	496204	$6\frac{14}{8}$	830984	$8\frac{14}{8}$	1218934
1	46094	$2\frac{15}{8}$	232086	$4\frac{15}{8}$	505773	$6\frac{15}{8}$	842340	$8\frac{15}{8}$	1231690
$1\frac{1}{16}$	50484	3	239516	5	515411	7	853754	9	1244640
$1\frac{1}{8}$	55004	$3\frac{1}{16}$	247046	$5\frac{1}{16}$	525110	$7\frac{1}{16}$	865219	$9\frac{1}{16}$	1257640
$1\frac{3}{8}$	59653	$3\frac{2}{8}$	254649	$5\frac{2}{8}$	534811	$7\frac{2}{8}$	876735	$9\frac{2}{8}$	1270665
$1\frac{1}{4}$	64410	$3\frac{3}{8}$	262320	$5\frac{3}{8}$	544627	$7\frac{3}{8}$	888302	$9\frac{3}{8}$	1283700
$1\frac{5}{8}$	69320	$3\frac{4}{8}$	270068	$5\frac{4}{8}$	554519	$7\frac{4}{8}$	899919	$9\frac{4}{8}$	1296856
$1\frac{3}{4}$	74075	$3\frac{5}{8}$	277915	$5\frac{5}{8}$	564444	$7\frac{5}{8}$	911585	$9\frac{5}{8}$	1309714
$1\frac{7}{8}$	79450	$3\frac{6}{8}$	285821	$5\frac{6}{8}$	574434	$7\frac{6}{8}$	923301	$9\frac{6}{8}$	1323212
$1\frac{9}{8}$	84686	$3\frac{7}{8}$	293800	$5\frac{7}{8}$	584489	$7\frac{7}{8}$	935065	$9\frac{7}{8}$	1336490
$1\frac{5}{4}$	90037	$3\frac{8}{8}$	301832	$5\frac{8}{8}$	594595	$7\frac{8}{8}$	946879	$9\frac{8}{8}$	1349764
$1\frac{5}{8}$	95494	$3\frac{9}{8}$	309955	$5\frac{9}{8}$	604739	$7\frac{9}{8}$	958738	$9\frac{9}{8}$	1363113
$1\frac{11}{16}$	101058	$3\frac{10}{8}$	318155	$5\frac{10}{8}$	614928	$7\frac{10}{8}$	970654	$9\frac{10}{8}$	1376636
$1\frac{1}{4}$	106726	$3\frac{11}{8}$	326416	$5\frac{11}{8}$	625245	$7\frac{11}{8}$	982617	$9\frac{11}{8}$	1389932
$1\frac{1}{2}$	112497	$3\frac{12}{8}$	334755	$5\frac{12}{8}$	635584	$7\frac{12}{8}$	994672	$9\frac{12}{8}$	1403419
$1\frac{5}{8}$	118355	$3\frac{13}{8}$	343128	$5\frac{13}{8}$	645975	$7\frac{13}{8}$	1006680	$9\frac{13}{8}$	1416930
$1\frac{3}{4}$	124322	$3\frac{14}{8}$	351622	$5\frac{14}{8}$	656427	$7\frac{14}{8}$	1018790	$9\frac{14}{8}$	1430500
		$3\frac{15}{8}$	360161	$5\frac{15}{8}$	666940	$7\frac{15}{8}$	1030950	$9\frac{15}{8}$	1444103

† This is a formula in ordinary use where weirs fixed according to the diagrams are placed across streams, and the weirs have a clear overfall. The table is not applicable for submerged weirs, nor where the water has a "velocity of approach."

APPENDIX G—*continued.*Weir Discharges—Formulæ used in Queensland—*continued.*

Depth in inches.	Gallons per 24 hours.	Depth in inches.	Gallons per 24 hours.	Depth in inches.	Gallons per 24 hours.	Depth in inches.	Gallons per 24 hours.	Depth in inches.	Gallons per 24 hours.
10	1457722	11	1681770	12	1916230	16	2950313	20	4123080
10 $\frac{1}{6}$	1471440	11 $\frac{1}{6}$	1695939	12 $\frac{1}{4}$	1976500	16 $\frac{1}{4}$	3019614	20 $\frac{1}{4}$	4200633
10 $\frac{1}{3}$	1485124	11 $\frac{1}{3}$	1710487	12 $\frac{1}{2}$	2037260	16 $\frac{1}{2}$	3089562	20 $\frac{1}{2}$	4278782
10 $\frac{2}{3}$	1498906	11 $\frac{2}{3}$	1724960	12 $\frac{3}{4}$	2098661	16 $\frac{3}{4}$	3160190	20 $\frac{3}{4}$	4357120
10 $\frac{1}{2}$	1512720	11 $\frac{1}{2}$	1739430	13	2160790	17	3231053	21	4436190
10 $\frac{5}{6}$	1526591	11 $\frac{5}{6}$	1753931	13 $\frac{1}{4}$	2223290	17 $\frac{1}{4}$	3302635	21 $\frac{1}{4}$	4515740
10 $\frac{2}{3}$	1540493	11 $\frac{2}{3}$	1768502	13 $\frac{1}{2}$	2286535	17 $\frac{1}{2}$	3374780	21 $\frac{1}{2}$	4595562
10 $\frac{7}{6}$	1554437	11 $\frac{7}{6}$	1783100	13 $\frac{3}{4}$	2350400	17 $\frac{3}{4}$	3447240	21 $\frac{3}{4}$	4675901
10 $\frac{1}{2}$	1568416	11 $\frac{1}{2}$	1797722	14	2414720	18	3520301	22	4756904
10 $\frac{9}{6}$	1582427	11 $\frac{9}{6}$	1812380	14 $\frac{1}{4}$	2479706	18 $\frac{1}{4}$	3594000	22 $\frac{1}{4}$	4838051
10 $\frac{5}{3}$	1596492	11 $\frac{5}{3}$	1827125	14 $\frac{1}{2}$	2545360	18 $\frac{1}{2}$	3667825	22 $\frac{1}{2}$	4919810
10 $\frac{1}{6}$	1610607	11 $\frac{1}{6}$	1841860	14 $\frac{3}{4}$	2611338	18 $\frac{3}{4}$	3742701	22 $\frac{3}{4}$	5002230
10 $\frac{3}{4}$	1624756	11 $\frac{3}{4}$	1856661	15	2678052	19	3817880	23	5084770
10 $\frac{3}{6}$	1638950	11 $\frac{3}{6}$	1871490	15 $\frac{1}{4}$	2745316	19 $\frac{1}{4}$	3893304	23 $\frac{1}{4}$	5167900
10 $\frac{4}{5}$	1653170	11 $\frac{4}{5}$	1886380	15 $\frac{1}{2}$	2812972	19 $\frac{1}{2}$	3969480	23 $\frac{1}{2}$	5251570
10 $\frac{1}{6}$	1667445	11 $\frac{1}{6}$	1901287	15 $\frac{3}{4}$	2881370	19 $\frac{3}{4}$	4046170	23 $\frac{3}{4}$	5335450
								24	5420031



APPENDIX II
Analyses of Artesian and Sub-Artesian Waters in New South Wales—*continued.*

—*continued.* TABLE II.

Name of Bore	Sodium Carbonate, (Na ₂ CO ₃).	Potassium Carbonate, (K ₂ CO ₃).	Calcium Carbonate, (CaCO ₃).	Magnesium Carbonate, (MgCO ₃).	Sodium Chloride, (NaCl).	Potassium Chloride, (KCl).	Magnesium Chloride, (MgCl ₂).	Sodium Sulphate, (Na ₂ SO ₄).	Potassium Sulphate, (K ₂ SO ₄).	Iron Oxide and Alumina, (Al ₂ O ₃ & Fe ₂ O ₃).	Silica, (SiO ₂).	Total Solid Matter, Grains per gallon.	Total Solid Matter, in 1,000 parts.
Calga, No. 3 (Private).....	6.178	2.551	6.750	3.746	2.168	.....	.....	1.151	.....	.364	1.456	24.364	.3478
Coolabah.....	46.502	.237	.875	.982	8.873	.....	.....	.....	.....	.280	1.890	59.639	.8519
Combogolong, I.L., 823.....	55.058	.154	.400	.199	11.469	.....	.....	absent	.....	trace	1.652	68.932	.9846
Combogolong, No. 2, I.L., 1,161.....	55.312	trace	.749	trace	7.464	.....	.....	absent	.....	trace	1.764	65.289	.9327
Coomimbla (Private).....	45.942	trace	.400	trace	9.071	.....	.....	.....	.....	trace	1.540	57.316	.8188
Carwell (Private).....	45.755	.086	.650	.115	8.673	.....	.....	.....	.....	.084	1.428	57.064	.8152
.....
.....
Dolmoreve (from shaft by pump).....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	164.136	2.3448
Dolmoreve (well bore).....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	163.632	2.3376
Dungle Ridge.....	52.564	6.945	.324	2.528	15.936	.....	.....	.....	.....	.....	1.792	80.089	1.1441
Dolgelly.....	33.819	trace	.348	trace	7.829	.....	.....	1.876	.....	trace	1.904	45.776	.6539
.....
.....
Emby (Private).....	43.972	trace	.349	.275	9.770	.....	.....	.....	.....	trace	1.484	55.850	.7978
Euraba.....	34.872	.295	.421	.140	8.388	.....	.....	2.046	.....	trace	1.540	47.702	.6815
Enngonia.....	30.367	4.741	1.199	.....	7.745	.....	.....	.....	.....	trace	1.694	45.746	.6535
Euroka (Private).....	56.490	.....	.255	trace	15.320	.....	.....	.....	.128	.....	.....	72.193	1.0313
.....
.....
Fort Bourke (Private).....	21.663	12.260	4.750	.037	9.720	.....	.....	.....	1.250	trace	4.088	53.768	.7681
.....
.....
Goangra.....	55.185	.252	.500	.084	17.346	.....	.....	.....	.....	trace	1.540	74.907	1.0701
Gnomery, Old.....	34.834	.275	.450	.084	7.331	.....	.....	.....	.....	trace	1.932	44.906	.6415
Goonery.....	28.746	trace	.550	.360	9.038	.....	.....	.....	.....	trace	1.624	40.318	.5759
Gidea (Private).....	35.392	trace	1.250	trace	9.686	.....	.....	.....	.....	.091	1.351	47.770	.6824
Gaffney's.....	.....	.....	10.500	4.009	246.215	trace	10.077	.....	.....	trace	.448	271.249	3.8892
Galgambone.....	17.716	.435	3.187	.767	2.910	.....	.....	.830	.....	trace	1.463	27.308	.3901
Gidgea Camp.....	30.712	3.347	1.299	.267	10.431	.....	.....	.....	.....	.168	1.344	47.568	.6794
Gilgandra.....	20.070	trace	3.946	1.991	149.219	.....	.....	.....	19.269	.420	1.176	196.091	2.8013
Gil Gil.....	32.630	1.701	.499	.127	7.258	.....	.....	.....	.....	trace	1.764	43.979	.6282
Gorianawa (Private).....	3.893	1.447	5.149	5.212	2.785	.....	.....	1.091	.....	trace	1.326	20.903	.2986
Gilgoin, No. 1, I.L., 752.....	41.007	trace	.512	.063	7.098	.....	.....	.....	.....	trace	1.302	49.982	.7140
Gilgoin, No. 2, I.L., 916.....	43.013	trace	.700	.136	6.984	.....	.....	.....	.....	trace	1.372	52.205	.7456
Ginghet.....	42.383	trace	.525	.137	6.699	trace	1.022	50.766	.7251
Gorian, 3-B., I.L., 1,388.....	38.513	trace	.339	.233	7.022	absent	.224	2.184	48.515	.6930
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.....
Haddon Rigg.....	28.974	trace	.400	.137	2.761	trace	.994	33.266	.4752
Haddon Rigg, No. 1 (Private).....	33.943	trace	.750	trace	5.734	trace	.980	41.407	.5915
Hungerford, No. 2.....	28.365	.528	1.650	2.265	48.678	.....	.....	.....	.....	trace	1.050	82.536	1.1791
Haddon Rigg, No. 2 (Private).....	27.694	0.219	.975	.283	3.857	.....	.....	.....	.....	.....	1.372	34.426	.4198

Analyses of Artesian and Sub-Artesian

Waters in New South Wales—continued.

Name of Bore.	Sodium Carbonate, (Na ₂ CO ₃).	Potassium Carbonate, (K ₂ CO ₃).	Calcium Carbonate, (CaCO ₃).	Magnesium Carbonate, (MgCO ₃).	Sodium Chloride, (NaCl).	Potassium Chloride, (KCl).	Magnesium Chloride, (MgCl ₂).	Sodium Sulphate, (Na ₂ SO ₄).	Potassium Sulphate, (K ₂ SO ₄).	Iron Oxide and Alumina, (Al ₂ O ₃ & Fe ₂ O ₃).	Silica, (SiO ₂).	Total Solid Matter, Grains per gallon.	Total Solid Matter in 1,000 parts.
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Kensington.....	48.301	.448	.450	.243	6.904	trace	1.330	57.676	.8239
Kiga.....	32.806	trace	.196	trace	6.937	1.020	trace	1.484	42.443	.6063
Kelly's Camp.....	16.869	5.666	.689	trace	7.909	.....	.....	.....	.....	.196	1.316	35.081	.5011
Kerribree.....	17.596	6.377	.649	.....	7.745	.....	.....	.....	.....	trace	.980	34.335	.4905
Kenmare.....	25.966	trace	1.050	trace	7.235	1.372	35.623	.5088
Kiameron, I.L., 793.....	43.861	trace	0.600	.210	4.508	1.456	51.268	.7324
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.....
Landers (Private).....	34.832	trace	1.250	.296	5.934	1.526	43.624	.6232
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.....
Mackenzie Point.....	40.268	trace	.575	trace	7.782196	2.744	51.565	.7366
Milchomi.....	51.082	trace	.799	.339	6.322	trace	1.456	59.998	.8571
Millie.....	37.999	absent	.425	.179	5.797	.....	.....	.....	.....	trace	1.218	45.618	.6517
Martindale (Private).....	40.725	absent	.449	trace	7.099	.....	.....	.....	.....	trace	1.708	50.008	.7144
Muckerawa, I.L., 930.....	41.148	trace	.312	.079	7.667	.....	.....	.....	.....	trace	1.302	50.508	.7215
Moongulla.....	54.795	5.457	.800	.....	19.930	.....	.....	.....	.....	.....	2.072	83.063	1.1866
Moree.....	39.259	1.101	.642	.295	7.029	.....	.....	.....	.....	trace	1.456	49.782	.7112
Mulgany.....	37.599	2.370	1.149	.127	8.788	.....	.....	.....	.....	trace	1.680	51.713	.7387
Moramina.....	45.56	trace	1.00	.38	7.25	.....	.....	.....	.....	.28	1.68	56.15	.8021
Morton's Plains (Private).....	29.457	trace	1.299	.720	35.956	.....	.....	.....	.....	.560	1.456	69.443	.9921
Morton's Plains (Private).....	34.198	trace	.650	trace	6.962	.....	.....	.....	.....	trace	1.764	43.574	.6225
Momba.....	.....	.....	.....	.....	181.295	{ CaCl ₂ } { 22.178 }	27.965	{ CaSO ₄ } { 11.971 }	12.813	.140	.700	257.062	3.6722
Mungie Bundie (Private).....	35.503	trace	.450	.200	6.733	.....	.....	absent	.....	.140	1.540	44.566	.6366
Munna Munna, I.L., 1,227.....	51.995	trace	.575	.210	6.219	.....	.....	.451	.....	trace	1.512	60.962	.8707
Mungrabambone, I.L., 945.....	43.182	.109	.675	.220	6.002	.....	.....	trace	.....	trace	2.016	52.205	.7456
Midkin (Private).....	35.456	trace	.575	trace	7.121	.....	.....	absent	.....	trace	1.946	45.098	.6442
Moorlands (Private).....	7.731	2.129	6.100	2.919	3.994	.....	.....	1.228	.....	.112	1.148	25.340	.3620
Mount Tenandera, No. 1 (Private).....	5.839	1.387	6.150	1.974	1.997	.....	.....	1.262	.....	.728	1.764	20.944	.2992
Macsville (Private).....	34.094	trace	.800	.189	4.268	.....	.....	.604	.....	.168	1.372	41.790	.5970
Mascotte (Private).....	37.581	trace	.700	trace	5.729168	1.344	45.584	.6512
Mount Tenandera, No. 2 (Private).....	5.757	.842	4.100	.1869	2.735224	1.330	17.052	.2436
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Ninety-one Mile.....	49.490	trace	.825	trace	11.930126	.861	63.232	.9033
Narraway, I.L., 1,011.....	33.977	.256	.575	.211	2.596	trace	1.498	39.113	.5587
Native Dog.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45.108	.6444
Nevertire.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	119.564	1.7080
Nedgera.....	27.066	.667	1.612	.540	1.574	.....	.....	.314	.....	trace	1.183	32.956	.4708
Nebea (Private).....	8.727	3.426	5.798	3.475	4.656	.....	.....	2.729	.....	trace	1.204	30.015	.4285
Newman's (Private).....	51.128	trace	.500	.168	7.418	.....	.....	.....	.....	.084	1.050	60.900	.8700
Noonbah, I.L., 1,172.....	33.025	trace	.800	.126	2.328	.....	.....	.....	.....	trace	1.498	38.080	.5440
Newman's No. 2 (Private).....	20.999	trace	1.000	.315	1.711	.....	.....	.836	.....	trace	1.526	26.544	.3792
Nelgowrie (Private).....	20.830	1.242	1.499	.741	1.735	.....	.....	.715	.....	.084	.980	28.140	.4020

APPENDIX H

Analyses of Artesian and Sub-Artesian

—continued. TABLE IV.

Waters in New South Wales—continued.

Name of Bore.	Sodium Carbonate. (Na ₂ CO ₃).	Potassium Carbonate. (K ₂ CO ₃).	Calcium Carbonate. (CaCO ₃).	Magnesium Carbonate. (MgCO ₃).	Sodium Chloride. (NaCl).	Potassium Chloride. (KCl).	Magnesium Chloride. (MgCl ₂).	Sodium Sulphate. (Na ₂ SO ₄).	Potassium Sulphate. (K ₂ SO ₄).	Iron Oxide and Alumina. (Al ₂ O ₃ & Fe ₂ O ₃).	Silica. (SiO ₂).	Total Solid Matter. Grains per gallon.	Total S. lid Matter in 1,000 parts.
Opera.....	.....	.....	8.190	.....	278.382	12.274	6.580	5.838	.....	.....	.996	312.260	4.4608
Osaca.....	56.508	2.437	.899	.699	11.368	.....	.....	.....	.....	trace	1.596	73.507	1.0501
Ottendorf, I.L., 1,201.....	51.407	trace	.875	.199	20.679	.....	.....	absent	.....	trace	1.274	74.434	1.0633
Parragundy.....	31.991	trace	.800	.285	7.621	.....	.....	.....	.....	trace	1.456	42.153	.6022
Pillicawarrina, I.L., 896.....	40.433	.079	.650	.233	4.188	.....	.....	.....	.....	trace	1.218	46.081	.6686
Pera, No. 1.....	33.118	1.225	.849	.402	7.600	.....	.....	.....	.....	.252	1.064	45.076	.6439
Poison Point.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Paldrumata.....	19.750	trace	6.100	8.897	321.300	.....	.....	.....	.....	.420	1.176	357.643	5.1092
Polly Brewan, I.L., 951.....	40.716	.103	.625	.147	7.589	.....	.....	absent	.....	trace	1.876	51.056	.7292
Pilliga.....	40.935	.497	.550	.285	7.532	.....	.....	.....	.....	trace	1.190	50.989	.7284
Quambone, No. 1 (Private).....	41.064	trace	.600	.252	7.315	.....	.....	.....	.....	trace	1.288	50.764	.7252
Quambone, No. 2 (Private).....	50.494	trace	.800	.147	14.197	.....	.....	.....	.....	trace	1.316	67.564	.9652
Quambone, No. 3 (Private).....	28.280	.493	1.800	.399	2.099	.....	.....	.504	.....	trace	1.596	35.224	.5032
Quambone, No. 1 (Private).....	40.145	trace	.599	.317	7.099	.....	.....	.....	.....	trace	1.260	49.420	.7060
Quambone, No. 2 (Private).....	42.638	trace	.475	trace	7.201	.....	.....	.....	.....	trace	.924	51.238	.7319
Quambone, Lower, I.L., 935.....	53.353	trace	.632	.196	6.537	.....	.....	.....	.....	trace	1.512	62.230	.8890
Quambone, No. 4, I.L., 905.....	39.246	.183	.650	.286	6.927	.....	.....	.575	.....	trace	1.435	49.302	.7043
Quabathoo, I.L., 907.....	49.406	.334	.687	.084	7.269	.....	.....	absent	.....	trace	1.288	59.068	.8439
Quanda (Private).....	4.677	1.961	5.750	3.005	5.090	.....	.....	2.252	.....	trace	.840	25.535	.3660
Quigley (Private).....	35.000	trace	.549	.148	2.602	.....	.....	.237	.....	trace	.084	40.040	.5726
Quandong, I.L., 821.....	41.734	trace	.599	.060	4.839	.....	.....	.....	.....	trace	1.260	48.972	.6996
Rowena.....	46.347	trace	.825	.233	7.027	.....	.....	.....	.....	trace	1.820	56.252	.8036
Regenbah (Private).....	28.003	.250	1.150	.273	1.891	.....	.....	.....	.....	.112	1.680	33.516	.4788
Santa Paula (Private).....	41.246	trace	.850	trace	9.312	.....	.....	.....	.....	trace	1.344	53.270	.7610
Sibraas.....	24.951	8.289	2.799	trace	30.321	.....	.....	.....	.....	.308	2.240	70.112	1.0016
Sandy Creek.....	.....	.....	.....	5.185	108.914	3.886	6.687	28.118	6.477	.280	.558	160.135	2.2876
Sandy Camp, I.L., 949.....	40.853	.462	.878	.095	6.675	.....	.....	absent	.....	trace	.722	49.685	.7097
Tunda, I.L., 1,280.....	46.675	trace	.650	trace	2.134	.....	.....	.912	.....	trace	1.400	51.771	.7396
Toooloon (Private).....	37.624	trace	.737	.079	7.646	.....	.....	.812	.....	trace	1.113	48.011	.6859